Mr. Balazs---CHAPTER 9-

**For Perfect Competition---ONLY**

Demand Curve is a horizontal straight line> Demand Curve =Price=Marginal Revenue=Average Revenue

**All Markets- PERFECT COMPETITION, MONOPOLISTIC, OLOGOPOLISTIC AND MONOPOLY**

**Marginal Cost**- Declines and then after DMR sets in increases

**Variable Costs**- are the sum of the Marginal Costs (NEW COSTS THAT RISE WITH A RISE IN OUTPUT)

*Eg- Restaurant Wait staff, food other items that can be increased or decreased depending on the output you want on that day.*

**Average Variable Costs**-Variable Costs/#Units Produced at that point

**Average Variable Cost follows Marginal Cost, if Marginal Cost declines, the average will decline, if Marginal Cost increases AVC will increase, since Marginal Cost decreases and then once it increases continues to increase, where Marginal Cost intersects AVC, AVC is at its lowest point.**

*Eg. Restaurant--- not including the fixed costs (ie rent, ovens etc…) the average cost of preparing meal---ie. It cost me $20 more dollars to make, serve, continuing opportunity cost and clean up the meal for a customer*

**Fixed Costs- Sunk/invested monies**

*EG- Restaurant, rent/ovens, monies you already spend. Ie. It cost me $50,000 to rent the restaurant and buy all the ovens, mixers etc…*

**Total Fixed Costs**- Do not change regardless of the amount of production. Investors want a return on their fixed costs BUT if they don’t get their return there’s nothing much they can do, since the investment is already paid in.

**Average Fixed Costs (AFC)- Since the costs are sunk in, the numerator (TFC) stays the same, while as output (meals) increase, (denominator) so AFC continues to decline**

*EG Restaurant, if I only make one meal, the $50,000 fixed cost->AFC of 50,000, if I make two meals, AFC=25,000, if I make 50,000 meals, AFC = 50,000/50,000--1*

**Total Costs is the sum of Variable Costs plus Fixed Costs- therefore as output increases more and more of the Total Costs is based on the Total Variable Costs**

*EG Restaurant- Fixed costs 50,000, variable costs for 5000 meals is $20,000. My total Cost are 70,000*

**Average Total Costs- TC/Q,**

**Like AVC, ATC is driven by the AVC (since Fixed Cost don’t change, they simply become a smaller and smaller portion of ATC as production increases)**

*EG Restaurant 50,000+20,000/5000- average total cost- 70,000/5000---$14.00 per meal*

**Profit= Total Revenue (amount of money I receive()– Total Costs (amount it costs me to produce)**

*EG if I sell 5,000 meals @$15.00 each---TR=$75,000, TC=70,000---ECON Prof.--$5,000*

**Total Revenue= sum of the Marginal Revenues**

**IN PERFECT COMPETITION- MARG REV DOESN’T CHANGE---SO THE DEMAND CURVE I FACE IS $15.00 PER MEAL---WHETHER I SELL 1, 5, 100 OR 5000 MEALS, MY PRICE IS $15.00, MY MR IS $15.00 AND MY AVERAGE REVENUE PER MEAL IS $15.00**

**If Marginal Revenue increases at a steady pace than so does Total Revenue**

**Zero profit- a return on your fixed investment, opportunity costs, and repayment of all variable costs**

*EG. Total Costs (rent, ovens, food, wait staff, what I would’ve made if I managed a restaurant for someone else, etc…)= $70,000, Total Revenue=$14.00 per meal, 5, 000 served=$70,000->70,000-70,000=0*

**Economic profit is more than zero profit.**

*EG see example, $70,000 cost-> $75,000 revenue*

***KEY IDEA***

***So long as the last good you make costs less or the same as the amount of money you make from selling that unit, it is in your economic interests to produce/sell it. Therefore you produce until MC=MR.***

*If the last meal I served cost me $13.50 more to make, and I sell it for $14.00—I make 50 cents on the transaction.--> throw the 50 cents in the profit jar!*

*If the next meal I serve cost me $14.00 more to make, and I sell it for $14.00, I covered all my new expenses->no money to throw in the profit jar, but I did cover my expenses! Plus my opportunity*

**COSTS**

***I decided not to make the next meal since it would cost me $14.01 more to make and I can only sell it for $14.00 If I made it, I’d have to take a penny out of the profit jar!***

**If MC>MR than you are losing money on that last good===DON’T MAKE IT DON’T SELL IT**

***Since MC is rising and MR in perfect competition is flat (in our example $14.00), we continue to produce/Sell until MC reaches MR.***

If where MC=MR, MR which is also the price of the good, is more than Average total costs (ATC)-than you are making an economic profit

*EG, if when my MC is $14.00 and the Price of the meal is $14.00 ( in perfect competition all meals would sell for the same price---if I raised the price no meals would be served and if I lowered the price to $13.90, I wouldn’t gain anything but would lose 10 cents on each meal served), the Average total Cost is 13.50----I served 5,000 meals at $13.50---$67,500 TC, my revenue was 5,000 x $14.00- $70,000 my econ, profit is $5,000*

**If MC=MR and ATC is equal to MR/P than you are at zero profit**

*EG MC=14, MR=14, Average Total Cost of each meal, is $70,000/5000= 14.00*

***If MC=MR and ATC is above but AVC is below MR/P than you are covering your ongoing costs but not completely getting a return on your fixed investment.***

*EG MC=14, MR=14, Average Total Cost is $15.00 per meal—($75,000/5000), Total Revenue is -5,000, I am showing a loss- do I stay in business?-> IT DEPENDS---IF I’M COVERING MY NEW COSTS- YES, IE. MY VARIABLE COSTS TOTALED $60,000 when 5000 meals were served--$12.00 (AVC) a meal, Total Revenue is 14 x 5000=$70,000, by staying in business- I can apply $10,000 towards my original investment (fixed costs)*

**If MC=MR and also equals AVC you are just paying off your ongoing costs**

**If MC=MR and is less than AVC you HAVE to put in more money to stay in business and you should shut down!**

*EG MC=14, MR=14, Average Total Cost is $15.00 per meal—($75,000/5000), Total Revenue is -5,000, I am showing a loss- do I stay in business?-> IT DEPENDS---IF I’M COVERING MY NEW COSTS- NO!!!!!!!!!, IE. MY VARIABLE COSTS TOTALED $71,000,000 when 5000 meals were served--$14.20 a meal, Total Revenue is 14 x 5000=$70,000, by staying in business- I not only don’t cover any of my FIXED COSTS---BUT, BUT, BUT---NOW I HAVE TO USE MY ATM CARD AND TAKE OUT A $1000.00 TO PAY THE SALARIES OF MY STAFF!!!===CLLLLLLLLLLLLLLLLLLOOOOOOOOOOOSSSSSSSSSEEE DOWN!*

***Some equivalencies that are important***

***TR= PxQ***

***TC=ATC x Q***

***When TR=TC, breakeven, no economic profit—all firms in perfect competition will move to the point where TR=TC***

***In perfect competition- P=D=MR=AR (Average Revenue per unit)***

***So since TR=P X Q, TR also =MR X Q***

***In all markets we always produce until MC=MR (after law of dim. Marg. Returns sets in), if we produced more goods than MC>MR and we’d lose money.***

***So since we produce until MC=MR then at the break even point TR= MC x Q***

***In perfect competition all firms will eventually get to the point where TR=TC, since TC= ATC x Q and Q is the same in both above equations, when one is at the breakeven point (no economic profit), ATC=MC, --PRODUCTIVE EFFICIENCY!***

***MC=ATC at the lowest point of the ATC curve meaning that the firm is producing at its least costly method! AND in the Wonderful World of Perfect Competition---(heavenly music playing)***

***P=D=MR=MC=ATC***

***Marginal Revenue is equal to the Marginal Benefit one gets by getting one more good***

***Marginal Cost =Marginal Cost***

***Marginal Benefit=Marginal Benefit at equilibrium---ALLOCATIVE EFFICIENCY- NO WASTE- THE ADDITIONAL VALUE THAT THE NEXT GOOD BRINGS IN IS EQUAL TO THE COST OF PRODUCING IT***